

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (canceled)

Claim 4 (currently amended): ~~The carbon media filter element according to claim 2 wherein~~
A carbon media filter element with urethane frame and seal comprising carbon filter
media comprising a granular carbon layer, including carbon granules, sandwiched between
first and second backing layers and forming a sheet having a perimeter with first and second
5 axial ends distally oppositely axially spaced along an axis along an axial direction, and first
and second lateral ends distally oppositely laterally spaced relative to said axis along a
lateral direction and extending axially between said first and second axial ends, said sheet
being pleated along axially extending bend lines to provide a plurality of pleats extending
axially between said first and second axial ends, a border member composed of urethane and
10 comprising a combined structural frame and seal extending along said perimeter and
providing both a support frame for said media and a seal along said ends of said sheet
retaining said carbon granules between said first and second backing layers and preventing
escape of said carbon granules out of said ends, wherein said pleats have a pleat height
extending between said bend lines along a height direction normal to said axial direction and
15 normal to said lateral direction, and wherein said border member has a height extending
along said height direction and at least as great as the height of said pleats and covering and
encapsulating said first and second axial ends including said carbon layer and said first and
second backing layers, said border member has a first section extending along said height
direction and providing said support frame and said seal, and has a second section extending
20 laterally outwardly from said first section in L-shape cross-section along all four of said
ends, namely said first and second axial ends and said first and second lateral ends, said
second section being and-resiliently compressible along said height direction for gasket

sealing, both of said first and second sections being composed of urethane, said L-shape having a first leg providing said first section and a second leg providing said second section.

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Claim 5 (canceled)

Claim 6 (currently amended): Manufacturing apparatus for making a carbon media filter element with urethane frame and seal, said carbon media filter element comprising carbon filter media comprising a granular carbon layer, including carbon granules, sandwiched between first and second backing layers and forming a sheet having a perimeter with first and second axial ends distally oppositely axially spaced along an axis along an axial direction, and first and second lateral ends distally oppositely laterally spaced relative to said axis along a lateral direction and extending axially between said first and second axial ends, said sheet being pleated along axially extending bend lines to provide a plurality of pleats extending axially between said first and second axial ends, and a border member composed of urethane and comprising a combined structural frame and seal extending along said perimeter and providing both ~~the~~ a support frame for said media and a seal along said ends of said sheet retaining said carbon granules between said first and second backing layers and preventing escape of said carbon granules out of said ends, said manufacturing apparatus comprising a mold base having a plurality of fins extending axially between first and second axial ends, and having a height extending upwardly along said height direction to upper peaks defining axially extending bend lines of said sheet, said upper peaks being laterally spaced by lower valleys therebetween also defining axially extending bend lines of said sheet, said base having an inner perimeter around said fins and having first and second axial ends distally oppositely axially spaced along said axis, and having first and second lateral ends distally oppositely laterally spaced relative to said axis and extending axially between said first and second axial ends of said inner perimeter, and having a plurality of corners joining said axial and lateral ends of said inner perimeter, said inner perimeter providing a

trough holding urethane therein, and a mold top having a plurality of fins extending axially between first and second axial ends, and having a height extending downwardly along said height direction to lower peaks defining axially extending bend lines of said sheet, said lower peaks being laterally spaced by upper valleys therebetween also defining axially extending bend lines of said sheet, said mold top mating with said mold base with said sheet therebetween being pleated by respective said fins and with said urethane in said trough molding to said ends of said sheet to provide said combined structural frame and seal border member.

Claim 7 (currently amended): The manufacturing apparatus according to claim 6 wherein one of said mold base and said mold top has one or more injection ports therethrough extending transversely to said height direction and communicating with said trough for injecting said urethane thereinto.

Claim 8 (currently amended): A method for making a carbon media filter element with urethane frame and seal, said carbon media filter element comprising carbon filter media comprising a granular carbon layer, including carbon granules, sandwiched between first and second backing layers and forming a sheet having a perimeter with first and second axial ends distally oppositely axially spaced along an axis along an axial direction, and first and second lateral ends distally oppositely laterally spaced relative to said axis along a lateral direction and extending axially between said first and second axial ends, said sheet being pleated along axially extending bend lines to provide a plurality of pleats extending axially between said first and second axial ends, and a border member composed of urethane and comprising a combined structural frame and seal extending along said perimeter and providing both ~~the~~ a support frame for said media and a seal along said ends of said sheet retaining said carbon granules between said first and second backing layers and preventing escape of said carbon granules out of said ends, said method comprising providing a mold base having a plurality of fins extending axially between first and second axial ends, and

15 having a height extending upwardly along said height direction to upper peaks defining
axially extending bend lines of said sheet, said upper peaks being laterally spaced by lower
valleys therebetween also defining axially extending bend lines of said sheet, providing said
base with an inner perimeter around said fins and having first and second axial ends distally
oppositely axially spaced along said axis, and having first and second lateral ends distally
20 oppositely laterally spaced relative to said axis and extending axially between said first and
second axial ends of said inner perimeter, and having a plurality of corners joining said axial
and lateral ends of said inner perimeter, said inner perimeter providing a trough, providing a
mold top having a plurality of fins extending axially between first and second axial ends,
and having a height extending downwardly along said height direction to lower peaks
25 defining axially extending bend lines of said sheet, said lower peaks being laterally spaced
by upper valleys therebetween also defining axially extending bend lines of said sheet,
providing said sheet between said mold base and said mold top and mating said mold base
and said mold top with said sheet therebetween to pleat said sheet by respective said fins,
and providing urethane in said trough and molding said urethane to said ends of said sheet to
30 provide said combined structural frame and seal border member.

Claim 9 (original): The method according to claim 8 comprising pleating said sheet
between said fins of said mold base and said fins of said mold top prior to introduction of
urethane into said trough.

Claim 10 (currently amended): The method according to claim 8 comprising providing at
least one injection port through at least one of said mold base and said mold top and
extending transversely to said height direction, and injecting molten urethane into said
trough to provide said combined structural frame and seal border member.